United Nations Industrial Development Organization

Distr.
LIMITED

ID/WG.475/1(SPEC.)
8 July 1988

ORIGINAL: ENGLISH

Regional Consultation on the
Phosphatic Fertilizers and
Pesticides Industry in Africa

Yamoussoukro, Côte d'Ivoire
12-16 December 1988

GUIDELINES ON THE PURCHASE, MAINTENANCE AND OPERATION OF BASIC INSURANCE COVERAGE FOR PROCESSING PLANTS IN DEVELOPING COUNTRIES *

Prepared by

A. James Edwards**
UNIDO Consultant

---

* The views expressed in this paper are those of the author and do not necessarily reflect the views of the Secretariat of UNIDO. This document has been reproduced without formal editing.

** Senior Vice-President, Reed Stenhouse Limited, Toronto, Canada.

V.88-26764

INDEX TO SECTIONS

SECTION 1	GENERAL
SECTION 2	TENDER STAGE
SECTION 3	THE PURCHASE CONTRACT
SECTION 4	MAIN CLASSES OF INSURANCE
SECTION 5	TRANSPORTATION INSURANCE
SECTION 6	INSURANCE OF THE WORKS ("DIRECT LOSS OR DAMAGE")
SECTION 7	INSURANCE OF THE SELLER'S OR CONTRACTOR'S EQUIPMENT AND PROPERTY
SECTION 8	BUSINESS INTERRUPTION INSURANCE ("DIRECT LOSS OR DAMAGE")
SECTION 9	LIABILITY INSURANCES
SECTION 10	GENERAL LIABILITY INSURANCE
SECTION 11	PROFESSIONAL INDEMNITY INSURANCE
SECTION 12	EMPLOYERS LIABILITY INSURANCE
SECTION 13	TENDER AND PERFORMANCE BONDS OR GUARANTEES
SECTION 14	PRODUCT GUARANTEES
SECTION 15	COMPLETION OF PLANT: ONGOING INSURANCE
SECTION 16	INSURANCE CLAIMS

FOREWORD

The planned purchase and development of an industrial plant is a major undertaking and is often subject to both contractual and non-contractual difficulties.

Heavy financial investment, foreign content, professional expertise and labour content are all brought together in one place in order to produce a properly working plant.

While numerous plants are developed without problems it is however common to see financial difficulties arise from a variety of events which can seriously frustrate the completion and subsequent operation of new industrial plants.

The insurance industry at large is well experienced in many of the risks which have prevented project and plant performance in the past. Indeed it is the problems which have arisen over the years which have generated the need for the special types of insurance available today and which are now considered to be essential and prudent management tools in the development of industry.

These guidelines are not comprehensive. Rather they are intended to explain in simple general terms which specific classes of insurance are applicable to certain potential risks or perils and which party to the purchase contract should preferably purchase and maintain individual insurance policies.

Emphasis is given to the necessity of properly documenting insurance requirements in contract agreements. This is essential.

BASIC INSURANCE PROTECTION FOR PURCHASERS OF

PROCESSING PLANTS IN DEVELOPING COUNTRIES

GUIDELINES ON SPECIFIC CLASSES OF INSURANCE

(A) PROJECT RISKS

RISK	CLASSES OF INSURANCE	SECTION	PURCHASED BY
Procurement and shipment of goods, materials, supplies and equipment to site	Transportation Insurance	5	The buyer or the seller depending upon the terms of shipment
Goods, materials, supplies, equipment and work in progress on site. Testing risks	Insurance of the Works	6	The buyer or the seller - in joint names
Contractor's plant and equipment	Insurance of Contractors Equipment	7	Contractors
Project delays following loss or damage in transit or on site	Business Interruption Insurance	8	The buyer or the seller
Incidents causing injuries to third parties and/or damage to third-party property	Liability Insurance; General Liability Insurance	9 & 10	The buyer or the seller - in joint names
Faulty design, engineering and project management	Professional Indemnity Insurance	11	Prof. architects engineers, proj. managers
Injuries, illness caused to employees	Employers Liability Insurance	12	All Employers on site - unless their employees not permitted to sue

(B) PERFORMANCE RISKS

RISK	CLASSES OF INSURANCE	SECTION	PURCHASED BY
Financial Guarantees; Surety Bonds	Tender and Performance Bonds on Guarantees	13	Tenderers, seller contractors, sub-contractors on behalf of their clients
Product Guarantees and/or Warrantees	Product Guarantees	14	Provided by seller and/or suppliers
(C) OPERATIONAL RISKS - Loss of or damage to the plant - Breakdown of machinery; explosion of pressure vessels - Business interruptions - Injuries to third parties and damage to third party property - Automobiles - Injuries to employees; illness of employees - Fraudulent acts of employees - Financial default of customers	On-going Insurances	15	The owner of the plant

SECTION 1. GENERAL

1.1. The purchase and provision of an industrial plant involves the participation of many parties each of whom provides specific services at various stages of the project.

1.2. Each stage of the project is subject to a variety of perils or risks.

1.3. The buyer of the plant has three main concerns relating to the provision of the plant:-

- The plant is completed on time.
- The cost of the plant is within budget.
- Upon completion the plant works properly and in accordance with specifications.

1.4. The perils encountered by project participants at the various stages of completion can, and do, have serious effects on the buyer's concerns detailed above.

1.5. It is essential that thorough consideration be given to the purchase and maintenance of adequate project insurance programs to ensure both the continuation of the project, the avoidance of cost-overruns and the satisfactory performance of the plant.

1.6. While it is impossible for the international insurance industry to fully respond to every single peril which could impede project continuation, project cost and plant performance, the insurance industry is well able to respond to many of the major perils and thus provide substantial protection to offset otherwise crippling financial problems.

1.7. These guidelines are designed to clarify the types of protection available in relation to perils discussed at various project stages and during initial and the continued operation of industrial plants.

1.8. As far as possible the guidelines will relate to perils which could be encountered on a progressive basis as a project is undertaken from the tender or bid stage through to full operation of the plant.

SECTION 2 - TENDER STAGE

2.1. The relevant tender documents should make good reference to the responsibilities and liabilities to be carried by the successful bidder, to any bid-bond or bid guarantee to be provided, to the requirement for subsequent performance bonds or guarantees and to the general insurances to be purchased and maintained by the successful bidder and/or the buyer.

2.2. It is important that at the time of tender the bidder and the buyer know inter alia exactly what insurance protection each will provide. This avoids the possibility of the bidder including unnecessary insurance costs and/or failing to allow for insurance costs he would otherwise expect the buyer to meet separately.

2.3. The bidder should show in his tender his anticipated costs for all insurances he is to provide separately by insurance product; these should not be included in one overall item.

2.4. Similarly the bidder should show in the tender the amounts of insurance coverage he will obtain. This is important and should be followed up at the time a contract is subsequently negotiated.

2.5. Consulting engineers and architects in particular should declare the cost and amount of insurance they would provide and maintain in respect of their professional liability insurance. The amount of insurance is important; it may have to be large in comparison to the size of their actual duties especially where the consequences of an engineering error or omission could have far-reaching effects.

2.6. Consulting engineers and architects, at the time of tender and later during contract negotiations, often attempt to limit their overall liability to the amount of professional liability insurance they carry. This should be avoided as this amount could be quite low or alternatively should their insurance be cancelled or simply not renewed and no longer exists then their overall liability would vanish.

2.7. Following sections will provide guidance on which party should best obtain and maintain certain essential insurances. Whichever party is saddled with this responsibility the tender and contract documents should clearly state the situation.

2.8. It is possible, and in some jurisdictions quite normal, for the tender documents to direct the bidder where he is obliged to obtain insurance to use certain national or local insurance organizations. This should only be done where it is known in advance that the insurers in question are able to provide the specific types of insurance required. This is important.

2.9. Bidders often resist directives as to where they must buy insurance. It may be that bidders who are heavily involved in international work maintain ongoing international insurance programs, which would otherwise meet contractual requirements, and which are expected to be applied by the relevant insurer.

Similarly bidders often argue that they have excellent relationships with their existing insurers and are reluctant to have to drop them and purchase insurance from others whom they do not know.

2.10. In any event if the bidder is expected to obtain insurance it is preferable that the tender documents state clearly whether certain insurers are to be used or whether he has a clear field to obtain insurance from any insurer of his choice but who is also acceptable to the buyer.

SECTION 3 - THE PURCHASE CONTRACT

3.1. A very wide range of purchase contracts exist in standard form. These are often heavily amended to suit individual needs.

3.2. Alternatively specific purchase contracts are drawn up project-by-project. These may be designed by the buyer, the seller or a third party.

3.3. Whatever form of contract is used it is essential that clear details are shown of the forms of insurance to be obtained and maintained.

3.4. Similarly the contract must define which party is to obtain and maintain each form of insurance and which party or parties is to be protected under the insurance.

3.5. Additionally the contract should state clearly what remedial action will be taken by one party should the other party fail to meet his contractual obligations insofar as the purchase and maintenance of insurance is concerned.

Usually, and for instance, should the seller be saddled with the responsibility for obtaining insurance and fails to do this, then the buyer maintains the responsibility for stepping in and purchasing the insurance himself. Often this is connected with a penalty whereby the seller then becomes responsible for the payment of insurance costs incurred by the buyer, depending upon the circumstances attaching to the seller's inability to obtain the required insurance coverage.

3.6. It is important that the purchase contract addresses the currency of certain insurances. Where "direct loss or damage" insurance is concerned and replacement equipment or materials have to be obtained from abroad then "hard currency" insurance is needed.

This point must be considered early-on as the participation of many national insurers into such "direct loss or damage" insurance may well produce a problem when such insurers are unable to issue "hard currency" policies as foreign exchange restrictions exist.

3.7. The contract should also demand that evidence of the existence of insurance be furnished by one party to the other and that actual insurance policy documents be made available for inspection upon demand.

3.8. Quite apart from full references regarding the provision by the seller of performance, maintenance and/or "hold-back" bonds or guarantees, it is possible for the purchase contract to call for the seller to obtain similar bonds or guarantees from his sub-contractors or suppliers.

The failure of a sub-contractor or a key supplier could have an enormously detrimental effect to the pursuit of the project. While the formal request for and the provision of such instruments from a sub-contractor or supplier is a contractual matter between the parties concerned, there is nothing to prevent the buyer demanding such protection be obtained by the seller under their particular contract.

3.9. Depending upon the payment terms of the contract it is possible for the purchase contract to define who is to be the "Loss Payee" under "direct loss or damage" insurance policies. The relevant policies issued should accurately reflect this.

3.10. It is becoming increasingly necessary that the purchase contract defines the amounts of insurance to be carried. This subject is addressed elsewhere in these guidelines.

As far as "direct loss or damage" insurance is concerned, it is a comparatively simple matter to define the amount of insurance to be purchased. Under "liability classes" of insurance it is not so easy; the Bhopal disaster in India may well be an extreme example of what can happen in the field of injury to the public but it is indicative of just what has to be considered when an industrial plant is set up and operated.

SECTION 4 - MAIN CLASSES OF INSURANCE

4.1. Leaving aside such types of insurance as LIFE, HEALTH AND DISABILITY the remaining insurances are generally split into two major classes, i.e.,

- MARINE INSURANCE
- NON-MARINE INSURANCE

4.2. "Marine Insurance", which is the earliest form of insurance protection, relates to any form of marine venture and extends into transit risks which have an element of marine risk.

Thus marine risk insurers will extend cover to include a transit of goods by land, sea or air. Similarly this class of insurance business includes the third-party liability risks attaching to marine ventures.

4.3. "Non-Marine Insurance", virtually includes everything else.

This class is split into various sub classes and for the sake of simplicity and especially for these guidelines the sub classes can be assumed to be:-

- "Direct loss or damage insurance" i.e. the insurance of property against the risks of fire, theft, damage, etc.
- "Liability insurance" i.e. insurance against the legal liability incurred for death or injury to third-parties or damage to third-party property.
- "Performance insurance" - although not a generic term and almost never used this relates to the provision by insurance companies of performance and related bonds. Insurers issuing such bonds are commonly referred to as "surety companies".

4.3. The purchase of an industrial plant, especially where foreign participation is involved, contains perils or risks which fall under all of the above classes and stem from:-

- the transportation of equipment and materials.
- the erection, construction and installation of buildings and plant.
- the use of construction machinery and equipment.
- heavy labour content.

4.3. (cont)

- the simultaneous activities of various participants.
- the professional services of consulting engineers, architects, contract managers, etc.
- the testing, commissioning and start-up of the plant.
- the use of project vehicles.
- the continuing operation of the plant.

4.4. The extent of specific insurance products designed to protect many project risks is wide. However, not all insurance companies write every class of insurance business described in these guidelines. Many insurers have preferred business; certain specialized insurers exist and others are more general.

Care should be taken in the selection of insurers to be approached.

4.5. While it is prudent to select insurers who are known to specialize in various aspects of project risks it is also prudent to select insurers who are known to be both fair and equable concerning the assessment and payment of claims and who, above all, are financially sound.

4.6. A "guarantee" is only as strong as the guarantor.

Several thousand professional insurance organizations exist and although they mostly financially support each other, each must be capable of meeting the huge liabilities accepted by them every working day.

The possibility of insurance company failure is very real; the probability of failure is not so real but too many do occur.

4.7. Insurance companies range from very small "mutual" companies, formed by trade associations, etc. and where each policyholder becomes a "member", through insurance companies or organizations which are partially or wholly-owned by governments or by single private shareholders to very large national and international public companies where the ownership is widely spread.

4.8. Whatever the makeup of the ownership of an insurance organization may be it has to maintain sufficient financial reserves to meet its outstanding claims. Governments usually maintain the responsibility of checking on these reserves to ensure the continued viability of the insurer.

Nevertheless, failures occur and when this happens claimants who have not been paid may well not get paid - at least in full.

4.9. Insurance companies usually pass-off, or "reinsure", their liabilities with other insurance companies - either to a single participant or to many participants. The more there are involved the more the risk is "spread" and the greater is the security to the policyholder - provided the "reinsurers" or participants involved are sound and of good standing.

4.10. There does exist government-owned insurance companies who may not reinsure or lay-off their risks with others - for whatever reason. In certain countries it is obligatory to buy insurance from "national insurers" and thus rely upon the full faith and credit of the sovereign state concerned.

4.11. These guidelines will segregate the required insurances into "marine" and "non-marine" classes and sub classes.

SECTION 5 - TRANSPORTATION INSURANCE

5.1. It is common to see foreign participation in the purchase and start-up of an industrial plant.

5.2. Irrespective of the nature of the purchase contract - be it full turnkey, part turnkey, separate direct contracts, project management, etc. - foreign participation is common in almost all phases of the project.

5.3. The procurement, transportation and delivery of goods, materials and equipment, by or through foreign entities each contain very real risks not least of which relate to the possible physical loss or damage to such items.

5.4. This is the subject of transportation or "marine cargo" insurance which is a highly developed form of insurance.

5.5. Basically this insurance pays for "cargo" which is lost, damaged or destroyed in transit or in storage connected with the transit.

5.6. Transit can be by land, sea or air; in any form of conveyance.

5.7. A variety of choices exist relating to the actual amount of insurance purchased. For the purposes of these guidelines these could be:-

(A) Actual invoice cost plus freight and other charges.

(B) The total costs of (A) plus a fixed percentage to allow for inflation during the replacement period - this is known as Increased Value or "I.V."

(C) Total replacement value. This is rarely used and difficult to assess but it can be applicable where a major item which is lost or damaged would take an unusually long time to replace at noticeably increased cost.

5.8. Who should buy transportation insurance? This depends upon the conditions of sale.

Where a sale is arranged upon an FOB ("free on board") basis the seller's interest in the goods ceases once they are loaded aboard the conveyance. Thus the seller's risk of loss or damage to the goods is limited to transits up to the FOB point. Thereafter the buyer is responsible for the goods and buys insurance accordingly.

Where a sale is arranged upon a CIF ("cost, insurance and freight") basis the seller is responsible for arranging transportation, delivery and insurance and should purchase full insurance accordingly.

5.8. (cont)

Alternatively the seller may be saddled with the responsibility to deliver the goods while the buyer prefers to arrange insurance; thus the sale would be effected on a C&F ("cost and freight") basis.

5.9. With the advent of containerization it is preferable that wherever possible a single transportation insurance policy is arranged from suppliers' premises right through to final destination.

This greatly simplifies otherwise serious problems where more than one insurance policy may exist, each covering a portion of the total transit; damage is discovered upon inspection at the final destination and it is not known exactly where the damage occurred. This results in arguments between insurers with each trying to pass over the claim to the other.

This situation could be otherwise avoided only by having the goods inspected at various loading and unloading points which is both costly and time-consuming.

5.10. Various forms of transportation insurance can be obtained:-

(A) The widest or most comprehensive form of marine cargo insurance is the "all risks" coverage. This is very broad but the title can be misleading as "all risks" policies do not include losses of an inevitable nature or where no accident occurs. This is the most expensive type of transportation insurance and includes the risks of theft and pilferage.

Technically such insurance is based upon The Institute Cargo Clauses (A).

(B) The Institute Cargo Clauses (B) provide slightly less coverage and are cheaper to buy.

Under these Clauses cover is restricted to the loss of or damage to goods caused by:-

(B)i fire or explosion.

(B)ii the stranding, grounding, sinking or collision of the vessel or craft.

(B)iii the overturning or derailment of land conveyance.

(B)iv the collision or contact of vessel, craft or conveyance with any external object.

(B)v discharge of cargo at a port of distress.

5.10. (B) cont.

(B)vi earthquake, volcanic eruption or lightning.

(B)vii general average sacrifice.

(B)viii jettison or washing overboard.

(B)ix entry of sea, lake or river water into the vessel, craft, hold, conveyance, container, liftvan or place of storage.

(B)x the total loss of any package lost overboard or dropped during loading on to, or unloading from, a vessel or craft.

(C) The Institute Cargo Clauses (C) provide similar coverage to (B) above except that coverage is not included for the risks detailed above under (B)vi, (B)ix and (B)x.

5.11. Where goods are carried by air the Institute Cargo Clauses (Air) are available. These provide similar coverages to those outlined under 5.10. above. The Clauses are suitably amended and the General Average Clause is deleted.

5.12. Care must be taken to make sure that an adequate amount of insurance is maintained while goods are temporarily stored at any location in connection with the transit.

This is important as an accumulation of goods at any storage point enroute is common depending upon the availability of shipping, temporary port closures, customs delays, etc.

5.13. Transportation insurance should extend to cover War Risks. Insurance underwriters will provide a separate cost for War Risks and it is important that where the seller is obliged under contract to provide and maintain transportation insurance the contract documents should clearly show that the insurance required be extended to include War Risks.

5.14. It is quite in order for either the seller or the buyer to arrange adequate insurance in respect of all shipments from any country of supply to final destination.

5.15. Upon completion of the transit, unloading and unpacking it is normal for separate "direct loss or damage" insurance to provide continuation of coverage for the goods received whilst on site, during construction, erection and testing and until final handover.

The on-site coverages are discussed in Section 6 of these guidelines.

SECTION 6 - INSURANCE OF THE WORKS ("DIRECT LOSS OR DAMAGE")

6.1. In Section 5 the insurance of materials and equipment in transit was discussed; this Section will consider the insurance of these items while on-site and following unpacking.

6.2. Losses incurred on-site could well be even larger than those encountered during transportation to site in view of the build-up of values.

6.3. Following arrival on site and during storage, construction, erection, installation, testing and commissioning, the materials and equipment, whether incorporated into the "works" or not are susceptible to numerous perils, i.e. fire, explosion, storm, earthquake, flood, accidental damage, collapse, subsidence, theft, etc.

6.4. Anything more than a minor incident could well hinder the progress of the work at hand and prove very costly to remedy. Furthermore a considerable delay in completion of the project could result in the loss or forfeiture of potential supply contracts.

6.5. The insurance industry is well able to respond to this situation by insuring the "works" against such events and in addition can insure against the financial consequences of a delay in plant start-up where such delay results directly from the damage incurred. (See Section 8)

6.6. Direct loss or damage insurance is commonly referred to as "Contractors All Risks Insurance" or "Contract Works Insurance" or "Builders Risk Insurance" (North American title). Depending upon the nature of the works involved it may be called "Erection All Risks Insurance".

6.7. This type of insurance policy is designed to apply to the whole term of the project from the breaking of ground and the arrival of materials and equipment on site right through to final handover and, to a lesser extent, the completion of maintenance.

6.8. It is common for either the seller or the buyer to purchase and maintain contract works insurance depending upon the desire and ability of each but as previously stated this obligation should be clearly shown in both the tender documents and the purchase agreement.

6.9. Whichever party has this responsibility he must make sure that the policy is issued in the joint names of the buyer and the seller as, due to staggered payment obligations by way of progress payments, each party has an "insurable interest" in both the work performed and the materials on site.

6.10. It is possible under such a policy to include as "additional insureds" any other party who has an insurable interest in the work as it progresses. However, one party - usually the party purchasing the insurance and paying the premium - is considered to be the prime insured.

6.11. Banks, including Development Banks, other Lenders or Mortgagees and sub-contractors may all be included as additional insureds under construction "direct loss or damage" policies as they could all stand to lose money if the works are damaged and thus they have an "insurable interest" in the project.

6.12. Most often sub-contractors do not appear as named insureds as the main contractor is most likely responsible for the work of sub-contractors and recompense for remedial work performed would be a matter for inclusion in sub-contract agreements.

However the contract works insurance should definitely include the value of all work undertaken irrespective of which participant actually undertakes the work.

6.13. The coverage provided is basically a form of "all risks" insurance and should relate to all work executed and all materials, goods and equipment on or adjacent to the site and intended for incorporation in the works.

This can of course include all form work, false-work and temporary structures and accommodations although should any of these items be and remain the sole property of the seller or contractor then it would be preferable to omit such items as they could be separately insured by the seller or contractor - see Section 7.

6.14. The term "all risks" insurance is not exclusive. Such policies do not provide coverage where losses result from:-

- War, civil war, rebellion, etc.
- Confiscation, expropriation or seizure by government entities.
- Loss of or damage to property insured caused by defective design, materials or workmanship.
- Loss of property by disappearance or shortage and discovered when an inventory is made.
- Normal upkeep or normal making good.
- Inherent vice, wear and tear, rust, mildew or other deterioration.

Insurers may seek to exclude other types or causes of loss; efforts should be made however to obtain the insurance deemed essential and this obviously would have an effect on the insurance premium charged.

6.15. The currency of "contractors all risks" or "contract works" insurance is very important. Where there is significant foreign content and local currency is not freely convertible every effort should be made to obtain "hard currency" insurance coverage.

This may be difficult for a local insurance organization to provide unless specific hard currency reinsurance is obtained from outside the host country. As it is common for the major international insurance companies to consistently provide hard currency insurance their potential participation should be considered early-on and the tender and purchase contract conditions should best state the currency to be used whether this particular insurance is to be obtained and maintained by the seller or the buyer.

6.16. It is permissible for such "on-site" insurance policies to be specifically endorsed to clearly define who and in what order, if necessary, the beneficiaries of claims payments will be.

6.17. As "contractors all risks" or "contract works" policies provide protection for the loss of or damage to the "works" it is possible to extend this type of coverage to loss or damage caused by testing of machinery, equipment or the whole process apparatus.

Depending upon the type of plant involved and the specific nature of the machinery or process the "testing risk" is often assessed to be the heaviest project risk. The testing of turbines is of particular concern to insurance underwriters and often separate and onerous terms are imposed in this respect.

6.18. Insurance underwriters habitually take the position of providing insurance coverage only for the major or catastrophe type of testing risks. In other words, this type of insurance policy may well exclude smaller items of loss or damage caused during testing as insurers may consider these to be virtually inevitable. Certainly meaningful "excesses" or "deductibles" are often applied which have the effect of removing insurers from the smaller incidents and leaves them covering only the larger losses where they exceed the amount of the "excess" or "deductible".

6.19. Normally these direct damage policies remain in force until final handover of the plant when annual operational insurances, purchased by the buyer, take over. There are variations; coverage may cease for portions of the work, as handed-over or at provisional handover or at other stages. Whenever it may be it is important that all parties to the contract know and understand this and arrangements are properly made at the inception of the purchase contract.

6.20. Although the policy ceases at handover an automatic time extension is usually given. This is a limited form of coverage and provides protection to the works or plant should damage be caused thereto by the seller, his contractors or sub-contractors while undertaking on-site work in the performance of their maintenance obligations in accordance with the purchase contract.

6.21. Very few new projects are completed and handed over at the original contract price. Variations and/or change-orders are common and numerous. Cost overruns may be considerable.

The value of work completed can easily exceed the amount of insurance carried. Although usually based on the estimated contract price the amount of insurance provided may be exceeded well before the project is completed. Much care should be taken to make sure that an adequate amount of insurance is in force during the course of the project so that valid claims can be fully met by the insurers who take the attitude that risks which are partially insured result in claims which are partially paid.

6.22. As earlier mentioned "contractors all risks" or "contract works" policies normally show an amount of insurance which reflects the estimated contract price. At the end of the project the final contract price is declared to the insurers who then recalculate the insurance premiums and either charge more premium or return a portion of the premium to the insured as the case may be, depending upon whether the declared amount is greater or lesser than the original figure.

6.23. Despite this premium adjustment exercise it must always be remembered that the insurers will not pay more than the amount of the insurance appearing on the policy. Thus this should be kept up-to-date in accordance with 6.21. above.

SECTION 7 - INSURANCE OF THE SELLER'S OR CONTRACTOR'S EQUIPMENT AND PROPERTY

7.1. This is best kept quite separate from the insurance detailed in Section 6. Often this insurance is added to or forms part of the "Contractors All Risks" or "Contract Works" insurance discussed in Section 6 but as these items are normally the sole property of the seller or contractor it is preferable for him to arrange his own separate insurance accordingly.

7.2. It is important that the buyer sees this is done and is provided with appropriate evidence.

Severe damage to or the total destruction of a key piece of construction equipment may not only result in a considerable delay to the project schedule but could possibly seriously affect the financial capabilities of the seller or contractor.

7.3. The provision of proper insurance coverage will ensure financial capability and should enable the early replacement of equipment.

7.4. Such mechanical plant, equipment, materials, temporary buildings and accommodations should be insured during transportation to the site, during erection and operation until final removal from the site.

7.5. This insurance is usually provided under "all risks" conditions and is based upon the actual cash value of the items in question.

Alternatively "replacement value" insurance may be obtainable. This has the effect of providing "new for old" when equipment or property is totally written-off. Such insurance is more expensive to buy as the premium rate has to be applied to the estimated replacement value of the property which inevitably will greatly exceed the actual cash value of the property involved.

7.6. Under this type of insurance the insurers mostly will not pay for minor damage or losses of a nuisance value and which the owner may well be able to handle himself.

7.7 It is unusual for insurers to provide coverage for the costs of repair to machinery or plant which suffers a mechanical breakdown. The loss of or damage to these items must result from extraneous events.

SECTION 8 - BUSINESS INTERRUPTION INSURANCE ("DIRECT LOSS OR DAMAGE")

8.1. Sections 5, 6 and 7 provide guidance as to the types of insurance available to cover the loss of or damage to goods and materials in transit, the project works and the equipment and temporary property on-site.

8.2. Depending upon what exactly is lost or damaged either in transit to the site or on the site itself it is possible that such loss or damage may have a serious effect upon the progress of the project. Severe resultant delays may follow.

8.3. During contract negotiations much will evolve around which party is responsible for project delays. The seller attempts to stand aside from all responsibility for delay; the buyer will try to pass all responsibility to the seller. All purchase contracts contain some element of compromise.

8.4. Irrespective of the final outcome of contract negotiations and despite how the purchase contract addresses the question of responsibility it is possible for whichever party who has an "insurable interest" in a project delay to obtain some insurance protection to cover his potential financial losseswhich result directly from such delay.

8.5. It is not possible to insure against the financial consequences of a project delay in all events. The non-performance by one party which results in extra costs or contract penalties being awarded against that party cannot be protected by insurance purchased by and in favour of that party.

However it is possible to insure against potential financial losses resulting from a project delay caused by the risks of direct loss or damage as mentioned in 8.2. above.

8.6. Both the "Marine Cargo Transit" and the "Contractors All Risks" or "Contract Works" policies are often extended to provide "Business Interruption" coverage. Where such insurance applies to a completely new project which has no production history this is often referred to as "Delayed Start-up" insurance or "Loss of Advance Profits" insurance.

Other generic terms exist and as ancillary incurred costs can also be covered under this class of business insurers habitually issue insurance policies directed toward "Project Delay" insurance, "Additional Costs of Working" and "Extra Expenses" insurance.

8.7. The actual terms used are in themselves not critical. For the purposes of these guidelines the paramount objective is to determine at the time of tender, or well before that, just what financial effect

8.7. (cont)

the loss of or damage to goods and materials, or the works in course of erection, construction, installation, testing or commissioning would have to the buyer or seller inter alia and whether such effect could be comfortably borne by either or both.

8.8. This demands a careful element of risk analysis.

8.9. Whatever the resultant potential losses are estimated to be it is of vital importance that the insurers approached be made fully aware of the details and make-up of these losses.

8.10. Under business interruption insurance insurers can be very accommodating and provided the financial losses stem from one or more of the direct loss or damage perils covered by transit or on-site insurance policies they are usually able to insure such losses.

8.11. Payment under such policies can be made in a variety of ways from flat pre-agreed sums to amounts calculated on a time basis i.e. certain sums payable per week, per month or half-yearly. An overall time limit is imposed.

8.12. Of critical importance under such insurance is the demonstrated ability of the purchaser of the insurance to be able to fully detail and prove his actual losses.

Insurers will not entertain any proposal where this is in doubt.

SECTION 9 - LIABILITY INSURANCES

9.1. Whereas the insurance of owned property against loss on damage is earlier referred to as "direct loss or damage insurance" the insurance of damage or injury caused to other peoples' property or to other people themselves is generally called either "third-party liability insurance" or simply "liability insurance".

9.2. More specifically the term "liability insurance" is split into generic terms applicable to the risks attaching to the operations undertaken by the insured i.e.;

- aviation liability insurance
- marine liability insurance
- automobile (or motor) liability insurance
- products liability insurance
- general liability insurance
- professional liability insurance
- employers liability insurance
- etc.

9.3. For the purposes of these guidelines, and as they relate to the risks attaching to the purchase, implementation and start-up of industrial plants, the terms "general liability insurance"; "professional liability insurance", and "employers liability insurance" will be used.

9.4. All liability insurance policies have common elements. They all provide protection against the possibility of claims being made against the insured should he be accused of negligently causing damage to third party property or injuries to third parties.

All liability policies are directed to the question of negligence; this has to apply. Insurers will not pay for claims resulting from deliberate acts, and they will not support insureds who are continually negligent and act imprudently.

All liability policies contain "limits of indemnity" which are the maximum amounts payable by insurers for either a single claim or the total of all claims in any one period. Insurers cannot pay more than the indemnity limit or limits appearing on the policy.

9.5. The question of the currency of this class of insurance is not so important to the insured as is "direct loss or damage insurance" as, despite whichever currency is used for the payment of the insurance premium, the insurer must face the possibility of paying third-party claims to third-parties in a variety of currencies depending upon the currency of the claim made by the claimants.

9.6. The following sections will briefly summarize the varieties, and relevant types of liability insurance mentioned above and will emphasize key points of importance in the purchase and maintenance of proper adequate protection.

SECTION 10 - GENERAL LIABILITY INSURANCE

10.1. It is essential that both the buyer and the seller maintain "general liability" or "general third-party" insurance. The financial consequences of serious events causing third-party injuries or damage can be sufficient to not only prevent the progress of a project but could result in the financial failure of project participants.

10.2. As liability insurance policies can cover more than one party it is usual for the buyer and the seller to both be insured under one policy issued in the joint names.

10.3. The tender and contract documents should clearly state which party is to obtain such insurance and is to keep it in force. Should the seller become the purchaser then he should separately show the insurance premium costs in his tender and later provide evidence to the buyer of premium payment.

10.4. Tender and contract documents should also state the amount of insurance, called the "limit of indemnity", to be obtained. If this is not done it is possible that a seller, in order to present a competitive price, could buy minimum coverage which could prove to be totally insufficient later.

10.5. It is difficult to select a limit of indemnity. Much depends upon the type of plant purchased, the location of the project in relation to surrounding property, the peculiar nature of construction work involved and the number of participating entities on site.

10.6. Liability insurers have to consider whether a project is susceptible to causing high risks such as fire, explosion, collapse, vibration, release of gases or chemicals any of which could result in major injury or damage to third parties and/or their property.

The use of explosives, heavy machinery and cranes may present particular hazards where the site is close to neighbouring property.

10.7. Although a liability policy may cover more than one party each is considered to be a third party to the other and claims between insured participants are covered by insurers who take the stand that coverage applies as if a separate policy had been issued to each party.

10.8. Thus it is technically possible to also include under such policies the liability risks of sub-contractors. While this is often done there and both advantages and disadvantages to doing this.

On the one hand a single policy could "wrap-up" all project participants and simplify the purchase of insurance thus avoiding the inclusion of insurance premium costings in a variety of sub-contracts. The insurer involved would underwrite on the basis that he is in effect issuing numerous separate insurances - but all under one policy - and would assess the premium accordingly.

On the other hand insurers may not be keen to underwrite the liability risks of everbody and prefer to be less exposed. Similarly sub-contractors may prefer to buy or use their own existing insurance policies arranged with people with whom they have maintained an excellent business and claims relationship.

10.9. Whichever method is chosen evidence of adequate insurance must be provided whether from the seller to the buyer - or vice-versa and from sub-contractors to the seller.

10.10. Liability policies purchased should be extended to include any extraordinary liabilities accepted by or imposed upon an insured by another party such as "Indemnities to Principals" or "Hold Harmless Clauses".

10.11. Insurance should whenever possible be purchased from financially sound insurers and should be in force at an early date so that coverage applies when the insured party commences his project obligations.

Similarly coverage should not cease until his project obligations, including any maintenance responsibilities, are fully completed.

10.12. It is quite common for insurances to impose a "deductible" or "excess" in respect of small property damage claims of a nuisance value. However small claims are usually fully handled by insurers where bodily injury to third-parties is concerned.

10.13. Chemical plants pose major liability problems as the possibility of bodily injury claims can be very real and the aggregate of numerous claims made may be enormous. As the seller and/or his sub-contractor may be proven to be negligent in causing a major incident it is imperative that a considerable amount of liability insurance be purchased and fully maintained. Obviously the cost of purchasing such insurance protection can be very heavy and should be taken into consideration at the time of tender.

SECTION 11 - PROFESSIONAL INDEMNITY INSURANCE

11.1. Known most widely as professional indemnity insurance the subject is also called "errors and omissions" insurance in some countries, particularly in North America.

11.2. The purpose of this insurance is to protect professional organizations and their employees against their legal liability to compensate third-parties who incur injury or damage due to their professional negligence.

Thus the question of negligence is paramount.

11.3. This specialist form of insurance is purchased by those engaged in a professional capacity i.e. engineers, architects, accountants, lawyers, doctors, etc.

11.4. Such professionals hold themselves out to be experts in their field and the contracts of service they enter into with others imply that they will exercise reasonable care and skill in performing their services. A failure to do this leaves the professional open to a suit for professional negligence.

11.5. It must be emphazised that the professional's liability is not limited to his client. While this may be his primary liability he is also liable to those third-parties who are outside his contract.

11.6. The whole question of the proper performance of an industrial plant is critical to the purchaser of the plant. The buyer contracts to purchase a plant under specific conditions which include, most importantly, initial and final performance criteria.

Having paid, or having agreed to pay, for the professional services specified then the buyer obviously wishes to retain rights of recourse against the professional should his services prove to be faulty.

11.7. Consulting engineers and architects carry heavy professional responsibilities; the consequences of their negligent acts can be enormous. Similarly organizations holding themselves out to be "contract or project managers" can be deemed to be professionally responsible, and thus negligent.

11.8. While the professional's liability to his client may be heavy his potential liability to other third-parties may be even heavier particularly in the case of chemical or similar plants where injuries resulting from the release of toxics can be very widespread.

11.9. Most consulting engineers and architects work for fees and maintain comparatively small assets. Thus successfull claims for negligence could easily destroy their practices. Their need for adequate insurance protection is often vital to their survival. Despite excellent records and prudent operation the costs of simply defending a court action could be too heavy to bear.

11.10. Thus the buyer of an industrial plant should demand that his professional contractors maintain adequate insurance and provide evidence that this has been done.

The question of "adequate" insurance is tricky as the purchase of high indemnity limits is both difficult and expensive. As professionals invariably pass insurance premiums on to their clients a buyer may find himself saddled with the payment of heavy sums in order to get the overall protection needed; but the consequences are too important to ignore.

11.11. Tender and contract documents must clearly define the amount of insurance to be carried so that this can be taken care of at the earliest stages of contract tender or negotiation.

The buyer who finds that his professional bidder cannot obtain insurance at least has the comfort of learning that such a bidder may be inexperienced or most probably has a poor claims record and has not previously exercised reasonable care and skill.

11.12. During the term of the project the buyer should ensure from time to time that professional liability insurance has remained in force and still applies.

11.13. As mentioned earlier in these guidelines buyers should beware of attempts by professionals to limit their overall liability under a contract to "the amount of insurance carried" or something similarly phrased. This manoeuver is often attempted.

On the one hand the amount of insurance may be totally insufficient and on the other hand should the professional allow his insurance to lapse then by implication he is free of liability under the contract.

11.14. It must be emphasized that comparatively few insurance companies will issue professional liability policies. This in itself tells a story; claims can be frequent and heavy leading insurance companies to decline this business.

Thus professionals, once insurance has been obtained, tend to "take this insurance with them" wherever they go and it may be quite futile in demanding that a professional buys a separate policy specifically for the project-especially in the country of the project-as it most probably will be unobtainable.

SECTION 12 - EMPLOYERS LIABILITY INSURANCE

12.1. In many jurisdictions employees are permitted to seek claims for damages against their employers under common law. Employers may therefore be held legally liable to their employees who sustain injuries or illness arising out of their employment.

12.2. Such potential liabilities are insured against by the provision of an employers' liability policy.

12.3. General liability insurance policies exclude claims in respect of employees who, under such insurance, are not considered to be "third-parties", thus the need for a separate form of insurance.

12.4. As legislation relating to the injury to or illness of employees varies from country to country it is not possible to be specific on coverages available but there are common elements.

12.5. It is common for employers liability policies to cover against claims which are not limited to accidental bodily injury; as noted above policies include claims for illness and would also respond when an injury is alleged to have been caused over a period of time during an employee's years of service.

12.6. In many countries employers liability insurance is part of governmental social security programs. Coverage is very often provided as an extension to a national workmens compensation insurance program.

12.7. In other countries claims under common law are not permitted; the benefits payable to employees under State social security programs are considered to be sufficient.

12.8. While it would be comparatively simple for the buyer of an industrial plant to make sure that local contractors or project participants obtain adequate employers liability insurance under a local program and include relevant costs in tender and contract prices the question of foreign sellers or participants can be more complicated.

12.9. Again as national regulations vary so much, for the purpose of these guidelines, it should be sufficient for the buyer to be prudent and make sure that all foreign project participants be asked to carry employers liability insurance and to provide evidence that this is done.

12.10. This may engender a response to the effect that employees of a given foreign participant are not permitted to sue their employers under pertinent legislation but at least the buyer will then know that exposure does not exist.

12.11. It is important however that the position of "third country nationals" be explored, i.e. a foreign participant may hire a sub-contractor or specialists from another foreign country where legislation permits common-law claims. The buyer should make sure that adequate employers liability is obtained accordingly.

12.12. The failure to maintain adequate coverage is important in the event of an injury to key employees or to many employees at one time. A sinple uninsured incident could result in heavy claims being awarded against the relevant employer resulting in financial default leading to non-performance.

SECTION 13 - TENDER AND PERFORMANCE BONDS OR GUARANTEES

13.1. Buyers of industrial plants run the risk of a seller, contractors, sub-contractors or suppliers failing to perform their contracted obligations.

The term "failure" is all-embracing; a participant may not be able to perform due to a variety of reasons including financial default. In any event the buyer needs some form of guarantee that what he has contracted to buy will be provided.

13.2. The general insurance industry is geared to providing such guarantees by way of "surety bonds". These should not be confused with guarantees provided through banks which while providing the buyer with comparable protection are commonly referred to as "guarantees" as opposed to "bonds" and regularly infringe upon the bonded party's line of credit with his bank.

13.3. Insurance companies specializing in this field are able to provide tender or bid bonds, performance bonds, supply bonds, labour and material bonds, maintenance bonds, etc.

13.4. All have a common element, i.e. one party is guaranteed by the insurance or "surety" company that another party will perform his contractual obligations.

13.5. "Bonding" is not pure insurance, i.e. it is not a contract of indemnity between two parties. In this class of business three parties are involved, the party requiring the issue of a bond (the "obligor") the bonded party (the seller, contractor or supplier) and the insurance or surety company.

Furthermore the surety company necessarily takes a "counter indemnity" from the bonded party thus having an element of financial recourse against him should he fail. If failure is due to bankruptcy then this recourse may not be worth very much as the surety stands in a relatively unsecured position behind all secured creditors including banks.

13.6. Nevertheless it can be seen that insurance or surety companies will provide bonds only to entities which are "bondable", i.e of sound financial standing and with a good record of performance.

13.7. By providing counter indemnities to the surety company it is obvious that any bonded party is limited in the aggregate amount of bonds he can obtain and which are in force at any one time. On the other hand the provision of a bond as opposed to a financial guarantee issued by a bank does not infringe upon the bonded party's credit standing with his bank.

13.8. BID OR TENDER BOND - ensures that a bid is made in good faith and that the surety will later issue a performance bond should the bid be successful. If however the bidder should fail to take up the contract the surety is responsible to the obligor, also called the "principal" in some countries, to pay the difference between the amount of the tender and the new price at which the contract may be awarded to another bidder. The amount of the bond is set by the buyer or obligor and usually the bidder includes the cost of obtaining the bond in his tender as a separate item.

13.9. PERFORMANCE BONDS - this type of surety bond is exactly what the title says, i.e. it is a bond which guarantees the contracted performance of the bonded party. In the event that the bonded party fails to perform his contractual obligations for any reason then the surety company is obliged to either complete the work or contract or to pay such amounts as needed to ensure completion up to the limit of the amount of the bond.

Here again the amount of the bond is set by the buyer and the cost of obtaining the bond is usually included in the contract or purchase price.

13.10. SUPPLY BOND - this is virtually the same as a performance bond but the term is used where a bond is needed which guarantees only the proper and timely delivery of goods and/or services.

13.11. LABOUR & MATERIALS BOND - this type of bond is common in North America but it is used and has application in other areas of the world. In simple terms the seller or contractor is asked to supply a labour and material bond, often as an addition to a performance bond, so that in the event of the failure of the seller or contractor sufficient monies become available from the surety to make good sums properly due to sub-contractors for work performed or expenses incurred by them and which would otherwise be unrecoverable.

13.12. MAINTENANCE BOND - Such bonds are not called for as frequently as performance bonds but are demanded by buyers on those contracts where an extended period of maintenance exists or where the maintenance obligations are extremely important to the initial operation of an industrial plant.

The bond simply guarantees that the maintenance obligations will be undertaken by the bonded party and may also be extended to guarantee the satisfactory functions of the completed work for a specified period.

13.13. It is important that both the tender and purchase contract documents clearly detail the type, amount and duration of all bonds required. Also the documents should state which party will be responsible for the cost of obtaining the bonds.

13.3. (cont)

Should the buyer wish to ensure that sub-contractors and/or suppliers also obtain and provide performance or supply bonds then this also should be clearly stated in the top contract(s) thus making the seller or contractor responsible to the buyer that such bonds will be provided.

13.14. BANK GUARANTEES - which are increasingly required in lieu of performance or contract bonds are often of an "on-demand" nature payable at first call by the obligor. This form of guarantee may well be considered as preferable by the buyer as the amount of the guarantee is immediately payable to him on first demand.

However, the seller's financial ability may well become seriously impaired by the provision of this type of guarantee as his operating line of credit at his bank is affected. Thus such guarantees while obtainable from only the strongest sellers have the effect of reducing the number of bidders interested.

Furthermore insurance or "surety" companies will only very rarely provide protection to a seller or a contractor where he has provided an on-demand guarantee which may be called by the obligor without qualification.

SECTION 14 - PRODUCT GUARANTEES

14.1 It is generally not possible to obtain insurance which covers the owner of an industrial plant should the plant not properly perform unless performance is affected by an incident of "loss or damage" or by mechanical breakdown.

14.2 Other sections of these guidelines address the purchase of "business interruption insurance" which applies to damage or mechanical break down incidents.

14.3 A buyer of an industrial plant does have the means of financial protection where none or partial performance is encountered. These usually are contained in the purchase contract itself and may take the form of:

- penalties for delayed completion;
- penalties for non-performance;
- liquidated damages;
- performance guarantees.

14.4 Section 13 has outlined in simple terms the various types of performance bonds in wide use and which provide the buyer with a certain amount of financial protection. Additionally a warranty of performance obtainable by the buyer from the seller imposes a contractual liability upon the seller to make good his work at his cost until acceptable performance is met.

14.5 Thus the seller may well face an overall onerous position as he has to face the possibility of having to pay stated contractual penalties and/or liquidated damages plus his costs incurred under warranty and possibly the calling of any performance bonds or guarantees he has provided.

14.6 While trying to present a competitive contract price to the buyer, the seller has the problem of nevertheless covering-off the potential costs of at least some of these liabilities in his price.

Similarly the seller will negotiate acceptable penalty limits and attempt to restrict his overall liabilities.

14.7 A seller will invariably not accept liabilities relating to any consequential losses incurred by the buyer and resulting from non-performance.

The insurance industry at large is very reluctant to provide coverage for such consequential losses.

14.8 Insurers take the view that the buyer has other means of recourse i.e. the penalties, guarantees and warrantees mentioned above and has the ability to take action against others who may allegedly have contributed to the non-performance in question i.e. the consulting and other professional engineers, project managers, etc.

As such professionals would most probably carry professional indemnity insurance it can be seen that insurers rightly or wrongly, consider that their exposures in this whole area are great enough.

14.9 Ironically, while it is virtually impossible in interesting insurers in covering the buyer's consequential losses due to non-performance, which does not result from physical damage or mechanical breakdown, it has been possible in the past for the seller to obtain insurance which covers his obligations under warrantees given.

14.10 This situation is particularly annoying to buyers as the seller, having negotiated himself contractually out of accepting any consequential loss liabilities, can insure his remaining "make good liabilities" contract or his warranty whereas the buyer who has had no part in the performance failure remains unprotected outside the limited contractual means of recourse he has and as mentioned above.

14.11 Thus a major financial exposure remains as far as the buyer is concerned i.e. the question of his potential consequential losses resulting from plant non-performance cannot at present be protected by insurance unless an incident of plant damage or mechanical breakdown is the cause.

SECTION 15 - COMPLETION OF PLANT: ON-GOING INSURANCE

15.1. Upon hand-over of the plant it fully becomes the property of the buyer or owner. Thus any responsibility which the seller, and/or his project participants, may have had to provide insurance now ceases.

15.2. The buyer now has the responsibility to prudently protect the plant and its continuing operation. Similarly the buyer must protect himself from the consequences of third-party claims for injury or damages alleged to be caused by the operation of the plant or by products produced by the plant.

15.3. Here again the same principals of "direct loss or damage" insurance and "liability insurance" apply.

15.4. Most countries now have appropriate legislation relating to the purchase of insurances by citizens of the country.

15.5. It is important that the relevant legislation is not breached as serious penalties may apply.

15.6. As far as the general insurance industry is concerned legislated restrictions on the purchase of insurance either inside or outside the country of the buyer, and thus the "country of risk", can be very briefly placed in the following groups:

(A) countries which maintain only nationalized insurance industries where insurance must be obtained from a designated state organization;

(B) countries which maintain both state and private domestic insurance organizations and where insurance must be obtained locally from any of these;

(C) countries which while maintaining both state and private domestic insurance organizations permit insurance to be purchased outside the country but apply financial penalties for doing this;

(D) countries which freely permit the purchase of insurance inside or outside the country.

15.7. Normally a caveat applies in those countries which do not freely permit the purchase of foreign insurance i.e. should the local insurance industry be unable to fully provide the coverage needed, either by type or by amount, then permission is normally given to purchase additional insurance from outside the country.

15.8. It may be necessary for the owner of a major industrial plant and especially one which carries a high liability risk factor e.g. a chemical plant, to seek professional advice on the construction and maintenance of an adequate insurance program as it will probably be necessary to involve many insurers some of whom may be foreign.

15.9. Briefly the owners must obtain adequate property and the ancilliary business interruption insurances on the plant itself.

This should be supplemented by "boiler and machinery" or "engineering" insurance, again extended to include business interruption risks.

An adequate amount of general and product liability insurance should be obtained and kept in force.

Other additional insurances are necessary and in most countries are compulsory i.e. automobile or motor third-party liability insurance and workmen's compensation and employers liability insurance.

15.10. Property insurance is fairly straightforward and is really an extension of the "contract works" insurance applicable during construction and installation.

Standard forms of coverage usually apply country-by-country and provide basic fire and lightning coverage. This may be extendable to cover damage to the plant caused by other perils i.e. explosion, flood, earthquake, windstorm, hail, aircraft, etc.

It is essential that the full value of the plant be insured preferably on a "replacement value" basis and especially where replacement would involve foreign supply. Consideration here should also be given to the insurer's ability to meet such costs in a convertible currency.

Property insurance premiums, usually payable annually, are not expensive considering the amount of coverage currently needed. Premiums are calculated on the probability of damage occurring and any loss-prevention facilities provided either in or adjacent to the plant.

15.11. The property insurance policy should be extended to include "business interuption" or "loss of profits" insurance. This is vital.

15.12. Depending upon the items damaged and the nature of the damage it is quite possible that a business interruption loss could well exceed the cost of the physical damage replacement. Thus consideration should be given to the most sensitive loss which could cause the widest disruption of business.

15.13. The basis of business interruption insurance is the payment of gross profit, wages, additional costs of working, etc. Coverage applies where damage occurs and which is covered as a peril under the main property insurance policy.

15.14. Once in operation "boiler and machinery" or "engineering" insurance should be considered. Such insurance covers the explosion risks of boilers, air receivers or other pressure vessels and the breakdown risks of all forms of plant and machinery which have moving parts.

15.15. Here again these policies can and should be extended to cover business interruption risks as mentioned above.

15.16. It is possible to extend boiler and machinery or engineering insurance policies to also cover damages caused to surrounding property and to third-party risks.

15.17. General third-party liability insurance is necessary and is based upon the risks inherent in the business itself, not just the plant in question. Certainly the continuing operation of the plant may be the major liability risk factor in pursuance of the overall business but such policies apply to all aspects of the business as conducted.

15.18. Liability policies are issued on an annual basis on the same lines as the property and boiler and machinery policies. Renewal terms are assessed by the insurers prior to renewal date and take into account any changes in the business conducted and any claims reported during the current year of insurance.

15.19. In this class of business insurers often settle liability claims several years after the date of the original reported incident. The question of the amount of outstanding claims liabilities carried has a major affect on renewal terms offered or even whether renewal is offered at all in the event of a continual record of claims incidents.

15.20. Where products are sold to others it is common to buy insurance protection against claims for injury or damage made by the users or consumers of such products. This could of course include foreign users or consumers. Thus "product liability insurance" becomes necessary.

This insurance is most commonly provided as an extension to the basic general third-party liability policy mentioned above.

This particular insurance usually carries a specific limitation of indemnity i.e. the relevant insurance company will place a separate limit of liability coverage on the policy insofar as it applies to "product liability"; which means that the amount of money the insurer will pay to settle product liability claims is limited to a specific total amount in any one year of insurance.

15.21. Should this specific limit of indemnity be considered inadequate it becomes necessary to buy additional or "excess" insurance on top of the basic policy which then becomes the "primary" insurance policy.

It is often necessary to obtain such insurance outside the country of operation. See 15.7. above.

15.22. The purchase of automobile or motor insurance, workmen's compensation and employers liability insurances should be quite straightforward and in accordance with both local customs and regulations.

The owner of an industrial plant should also be guided toward considering the risks of employee fraud and customer default.

The first mentioned is the subject of fidelity guarantee insurance and the second is taken care of by credit insurance.

15.23. Fidelity guarantee insurance involves the "bonding" of specific employees who may handle cash, securities or other items of value in the course of their employment.

Insurers will consider coverage based on specific security-type information which has to be furnished by both the employer and the employee. Employees who do not meet the insurer's underwriting criteria will not be insured and thus are not "bondable".

15.24. Customer defaults can of course prove harmful to any business. Manufacturers and merchants seek credit insurance against the risk of non-payment for goods and/or services supplied on credit terms.

15.25. Credit insurance forms a specific class of protection; only a few privately owned insurance companies write this business. National governments operate credit insurance agencies in many countries but these are mostly directed toward exports and thus provide "export credit insurance".

15.26. In theory it is possible to insure on a "whole turnover basis" (all sales to all customers) or on a "specific account" basis (all sales to a single customer only, over a twelve month period).

15.27. The availability of credit insurance is limited; facilities may not exist in several countries and where they do there is a marked lack of competition and flexibility.

For the purposes of these guidelines it is recommended that specialist professional assistance be obtained in the search for credit insurance availability. This may very well involve insurers outside the country of the insured party and thus may entail the obtaining of any legislative authority necessary to accomplish this.

15.28. It should be noted that where goods and/or services are sold to foreign governments the risks of non-payment, export or import embargoes, unilateral contract cancellation or repudiation etc. all become the subject of "political risk insurance".

Here again it is recommended that professional assistance be obtained in the pursuit of specialist insurance protection via either governmental or private insurance organizations.

15.29. Depending upon the terms of purchase or sale of goods and supplies - an owner of a plant may have to obtain transportation insurance coverage on goods, supplies, products and equipment in course of carriage, including storage.

Section 5 describes this coverage in general terms; the principles apply equally to domestic transit risks although insurance on domestic transits is usually purchased on an annual renewable basis as opposed to "open-term" marine cargo insurance policies.

SECTION 16 - INSURANCE CLAIMS

16.1. It is important that proper care is taken in the reporting and subsequent pursuit of any claims or potential claims made against any insurance company or organization.

16.2. Of greatest importance is the necessity to report all claims to insurers as quickly as possible. It is quite common for insurance policies to contain a condition stipulating a time limit within which claims are to be made.

Insurers often attempt to deny claims which are reported late to them.

16.3. The possible lack of knowledge by the insured of an earlier incident is only small defence; insurers will often insist that the insured should or ought to have known.

Thus a proper reporting system should be organized by the insured.

16.4. Specific personnel should be appointed as the recipients of relevant information regarding any incident which may give rise to an insurance claim. This should include all areas of injury or damage whether to employees, other people or their property or to property owned or on-site.

16.5. Subsequently such information should be reported to insurers formally and fully by a designated individual or department.

16.6. The designated personnel should make themselves known to the insurance companies involved, or to the loss adjustors appointed by the insurance companies to assess claims on their behalf.

16.7. Equally important is the necessity to maintain claims diaries so that a record of all actions taken and the response of insurers and loss adjustors is properly kept.

16.8. Similarly the diary will notarize all further communications received from the claimant or claimants. Proper corresponding files should be set up and typed or written notes of all conversations or messages should be kept on the files with a note of the action taken.

These notes must be dated.

16.9. Where liability-type claims are involved, i.e. claims made against the insured by injured employees or third parties - or third parties who allege damage has been caused to their property - it is most important that the insured or any officer, employee or agent of the insured does not admit responsibility to the claimant or claimants.

16.10. This would have the effect of the liability insurance company losing its own rights of repudiation or consideration with the result that the insurance company may well then refuse to provide protection to the insured as the insurer's rights have been compromised.

16.11. Where there are incidents of damage to the insured's property - or to property belonging to his contractors or suppliers - caused by fire, storm, flood, collapse, breakdown, accidental damage or similar events the insured should make every effort to protect the property from further damage.

16.12. This should be done as quickly as possible and the insurers should be advised that this is being done. For instance a small fire can mean that property becomes open to the weather leaving machinery, equipment, goods and stock exposed to additional damage by rain or storm, etc.

If it is impossible to immediately protect such items the insurer should be told.

16.13. If the insured acts prudently in all respects then it is difficult for insurers to formally deny claims except for suspected fraudulent events.

16.14. Insurers attempt to keep their claim payment as low as possible but they are obliged to pay fully in accordance with the conditions of the relevant insurance policy or policies. It is possible and common for the insured to challenge the denial of claims or any otherwise unacceptable claims payment offered.

16.15. Where claims settlement difficulties are incurred it is suggested that the onus be put upon the insurer to fully and properly detail all his reasons for either denial or partial payment.

16.16. It is recommended that when information on the value or replacement value of damaged property is provided to the insurer or his loss adjustor as the case may be, the insured should include all costs and additional costs he considers relevant - thus leaving the insurer to revert back with what he considers to be outside the claim.

This invariably leads to negotiation but is preferable to either having submitted only partial loss figures or to having had to add to an earlier claim amount should an omission be discovered after a formal claim amount has been earlier submitted.